

**REMARKS**

Claims 32-56 are pending in this application. No claim amendments have been made in response to the instant Office Action.

**REJECTIONS UNDER 35 U.S.C. § 102/103**

Reconsideration is respectfully requested of the rejection of claims 32-35, 40-42 and 52-55<sup>1</sup> under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,994,160 ("Niedermann"). Applicants respectfully submit that claim 32 and the claims dependent thereon are not anticipated nor rendered obvious by Niedermann.

Applicants respectfully submit that Niedermann does not disclose the limitations of claim 32, especially depositing microstructure material on the substrate to embed the nanotube in the microstructure material, as recited in claim 32. For example, Applicants' disclosure states and shows that a layer of cantilever material 9 is deposited on the sacrificial layer 8, embedding the nanotube 7 therein. See, e.g., Applicants' disclosure, Fig. 1G, page 16, line 33 – page 17, line 2 and page 18, lines 8-11.

The Examiner maintains that Niedermann discloses this limitation at col. 8, lines 12-20 and Fig. 4D (element 24b).<sup>2</sup> However, the cited portion of Niedermann does not read on the claimed embodiment. In contrast, Niedermann states that fine diamond particles (which the Examiner analogizes to the seed material) are deposited in both the recess 13c and the region 23c. Next, the diamond film is grown and "[t]he tip 3C is fastened to a ring-shaped base 24c corresponding to the diamond film which is formed

<sup>1</sup> Applicants note that in an apparent typographical error, the Examiner rejects claims 31-35. Applicants have taken the rejection to apply to claims 32-35, since claim 31 was canceled in the preliminary amendment dated July 14, 2004.

<sup>2</sup> It appears that the Examiner is referring to element 24c, since there does not seem to be any

on the region 23c." See Niedermann, col. 8, lines 8-20.

Accordingly, in contrast to the Examiner's conclusion, a microstructure material is not deposited on the substrate to embed a nanotube in the microstructure material. Indeed, like the tip 3c, the ring-shaped base 24c is the grown diamond film. Further, the tip 3c is only fastened to the ring-shaped base 23c, not embedded therein. Therefore, unlike the claimed embodiment, Niedermann does not teach or suggest separately depositing a microstructure material to embed a nanotube grown from the seed material.

As such, Applicants respectfully submit that Niedermann does not anticipate nor render obvious the embodiment as recited in claim 32.

Also, claims 33-35, 40-42 and 52-55 depend from claim 32, which, for the reasons stated hereinabove, is submitted not to be anticipated by and patentable over the cited reference. For at least those very same reasons, claims 33-35, 40-42 and 52-55 are also submitted not to be anticipated by and patentable over the cited reference.

Therefore, Applicants respectfully request that the Examiner withdraw the rejection of claims 32-35, 40-42 and 52-55 under 35 U.S.C. § 102(b), or in the alternative, under 35 U.S.C. § 103(a).

Reconsideration is also respectfully requested of the rejection of claims 43-47 under 35 U.S.C. § 103(a) as being unpatentable over Niedermann in view of U.S. Patent No. 6,960,334 ("Matsui").

Applicants respectfully submit that Niedermann, when taken alone or in combination with Matsui, does not expressly or inherently disclose the limitations of claim 32, especially depositing microstructure material on the substrate to embed the

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reference to 24b in Niedermann.

nanotube in the microstructure material, as recited in claim 32. Further, it would not have been obvious in view of the cited references to develop same.

As stated above, Niedermann does not disclose or suggest this feature. In addition, Matsui appears to be silent regarding the claimed feature of depositing microstructure material to embed the nanotube.

Therefore, it is respectfully submitted that Niedermann, when taken alone or in combination with Matsui does not disclose or suggest the recited features of claim 32, and that it would not have been obvious to modify Niedermann in view of Matsui to develop same.

As such, Applicants respectfully submit that claim 32 is patentable over Niedermann in view of Matsui.

For at least the reason that claims 43-47 depend from claim 32, claims 43-47 are also submitted to be patentably distinct over the cited references.

As such, Applicants request that the Examiner withdraw the rejection of claims 43-47 under 35 U.S.C. §103(a).

#### **DEPENDENT CLAIMS**

Applicants have not independently addressed the rejections of all the dependent claims because Applicants submit that, for at least similar reasons as why the independent claim from which the dependent claims depend is believed to be allowable as discussed, supra, the dependent claims are also allowable. Applicants however, reserve the right to address any individual rejections of the dependent claims should such be necessary or appropriate.

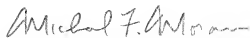
**ALLOWABLE SUBJECT MATTER**

Applicants gratefully acknowledge the Examiner's indication that claims 36-39, 48-51 and 56 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Although Applicants submit that claim 32, from which the allowable claims depend, is patentable over the cited references, Applicants reserve the right to rewrite claims 36-39, 48-51 and 56 in independent form in a subsequent response or communication.

An early and favorable reconsideration is earnestly solicited. If the Examiner has any further questions or comments, the Examiner may telephone Applicants' Attorney to reach a prompt disposition of this application.

Respectfully submitted,



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